4.MD.4 Summer Swimming

**Domain**: Measurement and Data

**Standard: 4.MD.4** Make a line plot to display a data set of measurements in fractions of a unit(1/2, ¼, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots.

**Launch:**

Talk about who likes to swim. Where do you swim? Who saw any swimming competitions during the Summer Olympics? Show a video clip of the Summer Olympic Swimming Events.

**Explore:**

Cara joined the swim team. During the first month she kept track of the distances she swam at each practice. Four times during the month she swam 1/8 mile. Two times she swam ¼ mile. Six times she swam ½ mile and six times she swam 1/3 mile. Create a line plot to represent to this information from least to greatest in fraction of unit.

Cara swam ¼ mile for two days. What is this total distance?

What is the total of her 1/8 miles distances?

How many more days would Cara need to swim 1/8 miles to equal one mile?

**Extensions:**

What is the difference between Cara’s shortest swim and her longest swim?

How far did Cara swim altogether?

How much more will she need to swim to join the 10 mile club?

**Share and Discuss:**

Invite students to share their line plots and justify their answers.

Debrief the task with the class talking about the mathematical concepts that were taught.

How else could you record data on line plot?

Student Task

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TITLE: Summer Swimming

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**Extensions:**

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How far did Cara swim altogether?

How much more will she need to swim to join the 10 mile club?